North Carolina
Department of Environment and Natural Resources

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Director

NCDENR

2003 SEP 15 A 11:57

C. FALCMER

September 9, 2003

ORIGINAL

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Michael E. Johnson
Environmental Manager
DuPont Fluoroproducts - Fayetteville Works
22828 NC Highway 87 W
Fayetteville, NC 28306-7332

Re: NOD for RCRA Phase I Supplemental Investigation Work Plan
DuPont Fluoroproducts - Fayetteville Works
EPA ID # NCD 047 368 642

Dear Mr. Johnson:

The North Carolina Hazardous Waste Section (HWS) has reviewed the document titled RCRA Phase I Supplemental Investigation Work Plan. The review process has raised some points that require additional discussion or clarification. Comments developed to offer guidance and aid with revisions to the work plan are listed below. The section numbers refer to sections in the work plan.

Section 1.4
Site Hydrogeology

1) DuPont-Fayetteville believes the groundwater flow direction is influenced by the direction of dip of a clay layer found beneath the surficial aquifer. This clay layer is mentioned in both the RCRA Phase I Report (revised 8/18/03) and the RCRA Phase I Supplemental Investigation Work Plan (8/22/03) as being a local control on the groundwater flow direction. Based upon information presented in the Phase I report, it is probably present beneath the entire site. Presumably, the reference to the clay layer as a local control is because of limited subsurface data.

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It is unclear from the text of the documents referenced above exactly how the clay layer affects the groundwater flow direction. The HWS is concerned that DuPont's interpretation implies the aquifer may behave as an anisotropic aquifer, and contaminant transport may not be in the directions suggested by the maps presented in the Phase I report and the supplemental work plan.

As an initial step, the HWS recommends that DuPont-Fayetteville construct a structure map on the top of the clay layer. The HWS understands that DuPont has numerous geotechnical logs which could be added to existing monitoring well and piezometer boring data to make such a map. The map may also be useful as DuPont attempts to accomplish the objective discussed in Section 2.3 (Seepage Faces and Lithology Investigation).

2) DuPont-Fayetteville suggests there is a groundwater divide with SWMU 6-Common Sump on one side and with SWMU 9A&B and the former fire training area on the other. The HWS recommends that DuPont-Fayetteville map the groundwater divide and discuss how this feature may affect the distribution of contaminated groundwater. The discussion should also attempt to explain how the factors mentioned in Comment 1 would affect groundwater flow in the area of the divide.

Section 2.4
Objective 4: Risk Evaluation

3) As part of the proposed risk evaluation, DuPont-Fayetteville should complete the EPA EI questionnaire. This will be the first EI evaluation for the DuPont-Fayetteville facility.

Additional Comments

4) A situation occasionally arises at a facility that is not under the jurisdiction of the Hazardous Waste Section, but the HWS will agree to ensure that human health and the environment are protected. In other words, the HWS will, with the consent of the facility and the agency with legal jurisdiction, become the lead agency and administer the situation following the rules, policies, and guidances of the secondary agency.

DuPont-Fayetteville uses chemical constituents and compounds frequently not regulated under RCRA. The HWS believes the best interests of both parties would be served if DuPont-Fayetteville investigated all potential releases as part of the RCRA Facility Investigation. If DuPont-Fayetteville agrees, the HWS will discuss this option with the NC Groundwater Section.

5) Monitoring well SWMU 6-03 was sampled as part supplemental confirmatory sampling activities conducted in July 1999. At that time, several constituents were detected at concentrations exceeding NC 2L Groundwater Standards, Interim 2L Standards, or recommended standards. As the HWS understands the sequence of events, the "common sump" was identified as the source of the release, and repairs were performed at about this same time.

In recent correspondence (date June 6, 2003), DuPont-Fayetteville reported that ammonium perfluorooctanoate was detected at an average concentration of 0.068 ug/L in groundwater samples collected from monitoring well SWMU 6-03. This constituent was apparently only used recently and for a short period of time.

The HWS recommends that DuPont-Fayetteville conduct additional investigations to identify and characterize potential releases in the vicinity of the "common sump." In addition, DuPont-Fayetteville should again sample monitoring well SWMU 6-03. The list of constituents of concern should include not only ammonium perfluorooctanoate but also those constituents detected during previous investigations. DuPont-Fayetteville may also need to add ammonium perfluorooctanoate to the list of constituents of concern for the monitoring wells and piezometers already proposed for sampling during supplemental Phase I activities.

6) The document titled RCRA Phase I Report was revised in August 2003. However, the revised pages received by the HWS did not include new cover pages showing the date of revision. Please submit enough revised cover pages for three documents (i.e., six cover pages).

DuPont-Fayetteville should submit responses to the Hazardous Waste Section=s comments or revisions to the referenced documents within ninety (90) days of the receipt of this letter. If your office has questions concerning this correspondence, please call me at (919) 733-2178 extension 236.

Sincerely,

Larry Stanley

Larry Stanley
Hydrogeologist
NC Hazardous Waste Section

cc: Narindar Kumar, EPA Region 4
Bobby Nelms
Larry Stanley

rc: Bud McCarty
Bob Glaser
Karim Pathan
Larry Stanley

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